```
<110> INOUYE, MAŚAYORI
      PHADTARE, SANGITA
      YAMANAKA, KUNITOSHI
      KATO\ IKUNOSHIN
<120> ANTIBACTERIAL ACTIVITY OF 4.5 DIHYDROXY-2-CYCLOPENTAN-1-ONE
      (DHCP) AND CLONING A GENE CONFERRING DHCP RESISTANCE IN
      ESCHERICNIA COLI
<130> 1137-P-00
<140>
<141>
<150> 60/228,727
<151> 2000-08-29
<160> 2
<170> PatentIn Ver. 2.
<210> 1
<211> 3900
<212> DNA
<213> Escherichia coli
<400> 1
qccaqccact cttccaqctg acgcacggta tagctgaccg cagaaggaac gcgatgcagc 60
tcctgtgccg cagcgctaaa actadcatta cgcgctaccg catcaacaac ttcgagtgaa 120
tattctgacc acatagtctg cctgchaaat ttttgaaacc agtcatcaaa tattaccgtt 180
tcacaacact aatttcactc cctacdcttt gcggcggtgt ttaattgaga gatttagaga 240
atatacatgc aacctgggaa aagatttta gtctggctgg cgggtttgag cgtactcggt 300
tttctggcaa ccgatatgta tctgcctgct ttcgccgcca tacaggccga cctgcaaacg 360
cctgcgtctg ctgtcagtgc cagccttagt ctgttccttg ccggttttgc cgcagcccag 420
cttctgtggg ggccgctctc cgaccgttat ggtcgtaaac cggtattatt aatcggcctg 480
acaatttttg cgttaggtag tctggggatg ctgtgggtag aaaacgccgc tacgctgctg 540
gtattgcgtt ttgtacaggc tgtgggtgt/c tgcgccgcgg cggttatctg gcaagcatta 600
gtgacagatt attatectte acagaaagtt aaccgtattt ttgeggeeat catgeegetg 660
gtgggtctat ctccggcact ggctcctctg/ttaggaagct ggctgctggt ccatttttcc 720
tggcaggcga ttttcgccac cctgtttgcc \attaccgtgg tgctgattct gcctattttc 780
tggctcaaac ccacgacgaa ggcccgtaac atagtcagg atggtctgac ctttaccgac 840
ctgctacgtt ctaaaaccta tcgcggcaac dtgctgatat acgcagcctg ttcagccagt 900
ttttttgcat ggctgaccgg ttcaccgttc atccttagtg aaatgggcta cagcccggca 960
gttattggtt taagttatgt cccgcaaact atcgcgtttc tgattggtgg ttatggctgt 1020
cgcgccgcgc tgcagaaatg gcaaggcaag caattattac cgtggttgct ggtgctgttt 1080
gctgtcagcg tcattgcgac ctgggctgcg ggcttcatta gccatgtgtc gctggtcgaa 1140
atcctgatcc cattctgtgt gatggcgatt gccaatggcg cgatctaccc tattgttgtc 1200
geccaggege tgegteeett eccaeaegea actggtegeg eegeagegtt geagaacaet 1260
cttcaactgg gtctgtgctt cctcgcaagt ctggt/agttt cctggctgat cagtatcagc 1320
acgccattgc tcaccaccac cagcgtgatg ttatcacag taatgctggt cgcgctgggt 1380
tacatgatgc aacgttgtga agaagttggc tgccagaatc atggcaatgc cgaagtcgct 1440
catagogaat cacactgacc tatatogata tacttatact taggotgota acaaaatttt 1500
gttgtatgat tgaaattagc ggcctatact aatttcgagt tgttaaagct acgataaata 1560
```

ttatgttttt acggggacag gatcgttccc gactcactat ggatagtcat ttcggcaagg 1620 gttcctcctt tccctctgtt ctacgtcgga ttatagactc gcggtttttt ctgcgagatt 1680 tctcacaaag cccaaaaagc gtctacgctg ttttaaggtt ctgatcaccg accagtgatg 1740

In Hall In B. Ren Land

O ID

In

n

ID

Pape





gagaaactat	gagttcatcg	tgtatagaag	aagtcagtgt	accggatgac	aactggtacc	1800
gtatcgccaa	cgaattactt	agccgtgccg	gtatagccat	taacggttct	accccaacaa	1860
atattcgtgt	gaaaaacccc	gatttttta	aacgcgttct	gcaagaaggc	tctttggggt	1920
taggcgaaag	ttatatggat	ggctggtggg	aatgtgaccg	actggatatg	ttttttagca	1980
aagtcttacg	cgcaggtctc	gagaaccaac	tcccccatca	tttcaaagac	acgctgcgta	2040
ttgccggcgc	tcgtctcttc	aatctgcaga	gtaaaaaacg	tgcctggata	gtcggcaaag	2100
agcattacga	tttgggtaat	gacttgttca	gccgcatgct	tgatcccttc	atgcaatatt	2160
cctgcgctta	ctggaaagat	gccgataatc	tggaatctgc	ccagcaggcg	aagctcaaaa	2220
tgatttgtga	aaaattgcag	ttaaaaccag	ggatgcgcgt	actggatatt	ggctgcggct	2280
ggggcggact	ggcacactac	atggcatcta	attatgacgt	aagcgtggtg	ggcgtcacca	2340
tttctgccga	acagcaaaaa	atggctcagg	aacgctgtga	aggcctggat	gtcaccattt	2400
tgctgcaaga	ttatcgtgac	ctgaacgacc	agtttgatcg	tattgtttct	gtggggatgt	2460
tcgagcacgt	cggaccgaaa	aattacgata	cctattttgc	ggtggtggat	cgtaatttga	2520
aaccggaagg	catattcctg	ctccatacta	tcggttcgaa	aaaaaccgat	ctgaatgttg	2580
atccctggat	taataaatat	atttttccga	acggttgcct	gccctctgta	cgccagattg	2640
ctcagtccag	cgaaccccac	tttgtgatgg	aagactggca	taacttcggt	gctgattacg	2700
atactacgtt	gatggcgtgg	tatgaacgat	tcctcgccgc	atggccagaa	attgcggata	2760
actatagtga	acgctttaaa	cgaatgttta	cctattatct	gaatgcctgt	gcaggtgctt	2820
tccgcgcccg	tgatattcag	ctctggcagg	tcgtgttctc	acgcggtgtt	gaaaacggcc	2880
ttcgagtggc	tcgctaaagg	ctattctatc	gcccctctc	cgggggcgat	ttcagatcag	2940
gcttctgtgc	ctggttgatt	catggcattt	tctcgtgccg	ccagcacacg	ttctaccgta	3000
tctaccactg	cctgagtttg	tggatcgatt	tcaatgttga	cgcgtgcgcc	aagtttttc	3060
ttcccaagag	tcgtgcgttc	cagtgtttcc	ggaattaaat	ggacgcaaaa	acgcgttggc	3120
gtgacttcgc	cgacggtcag	gctaataccg	tcgatgccaa	taaatccttt	gtacagaata	3180
tatttcatca	actgactatc	ctggacttta	aaccagatct	ggcgattatt	ttctgaggtt	3240
aatattttcg	ccacttcagc	agtggtcata	atatgacctg	acattaagtg	tccgccaatt	3300
tcatcactga	atttcgccgc	acgctcaacg	tttacccaat	ccccacttt	taaatcgcca	3360
agattggtaa	tgcgtaacgt	ttctttcatc	aggtcaaaac	tgacatggtt	gccgttaatt	3420
tccgtcacgg	tcaggcagca	accgttatgc	gccacggaag	caccggtttc	caggccgtcc	3480
agcatgtggt	cgggtaactc	caccacatgc	gtacgaaaat	ttggtttctc	gtcaatcgac	3540
accagttttg	cggtgccctg	tacaatcccc	gtaaacatac	ttacaactcc	tgaaatcagt	3600
taagacattc	tgttcagcac	aatagcaggt	ggaaaacgcc	cttaccagtg	aaggggtaag	3660
aatggctatt	ttttcactgg	agaattaata	aatcctcgct	acaatagact	gaatttcccc	3720
tgcttcttct	ttttgctgcc	cattcaggcg	gctttttagt	ctctcatata	actacaaata	3780
aaaggtgttc	acgtgcagaa	gtatatcagt	gaagcgcgtc	tgttattagc	attagcaatc	3840
ccggtgattc	tcgcgcaaat	cgcccaaact	gcgatgggtt	ttgtcagtac	cgtgatggcg	3900

```
<210> 2
```

<211> 1212

<212> DNA

<213> Escherichia coli

<400> 2

atgcaacctg ggaaaagatt tttagtctgg ctggcggtt tgagcgtact cggttttctg 60 gcaaccgata tgtatctgcc tgctttcgcc gccatacagg ccgacctgca aacgcctgcg 120 tctgctgtca gtgccagcct tagtctgttc cttgccggtt ttgccgcagc ccagcttctg 180 tggggggccgc tctccgaccg ttatggtcgt aaaccggtat tattaatcgg cctgacaatt 240 tttgcgttag gtagtctggg gatgctgtgg gtagaaaacg ccgctacgct gctggtattg 300 cgttttgtac aggctgtggg tgtctgcgcc gcggcggtta tctggcaagc attagtgaca 360 gattattatc cttcacagaa agttaaccgt attttgcgg ccatcatgcc gctggtgggt 420 ctatctccgg cactggctcc tctgttagga agctggctgc tggtccattt ttcctggcag 480 gcgattttcg ccaccctgtt tgccattacc gtggtgctga tctgcctat tttctggctc 540 aaacccacga cgaaggcccg taacaatagt caggatggtc tgacctttac cgacctgcta 600 gcatggctga ccggttcacc gttcatcctt agtgaaatgg gctacagcc ggcagttatt 720 ggtttaagtt atgtccgaa aactatcgcg tttctgattg gtggttatgg ctgtcgcc 780 gcgctgcaga aatggcaagg caagcagtta ttaccgtggt tgctggtct gtttgctgtc 840